

Public Database Indexing
Guidelines and Recommendations
Release 1.1

Notice

*This edition reorganizes the material and makes minor stylistic changes in the text. A table of contents has been added, and the definition of terms section has been expanded. There are no substantive changes in the indexing procedures. This revised edition is accessible via the Internet at **<http://www.spr.dcr.state.nc.us>**.*

North Carolina Department of Cultural Resources
Division of Archives and History
State Public Records Cataloging Services (SPRCS)

September 1996

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Preface

Under Senate Bill 426, enacted as Chapter 388 of the 1995 Session laws, the General Assembly amended the North Carolina public records law (G.S. 132) to strengthen the public's ability to access all public records. One part of the amended law requires both state agencies and local governments to index their databases and specifically directs the Division of Archives and History to develop guidelines for compliance with this requirement.

G.S. 132-6.1.(b) reads as follows:

Every public agency shall create an index of computer databases compiled or created by a public agency on the following schedule:

- (1) State agencies by July 1, 1996;
- (2) Municipalities with populations of 10,000 or more, counties with populations of 25,000 or more, as determined by the 1990 U.S. Census, and public hospitals in those counties, by July 1, 1997;
- (3) Municipalities with populations of less than 10,000, counties with populations of less than 25,000, as determined by the 1990 U.S. Census, and public hospitals in those counties, by July 1, 1998.
- (4) Political subdivisions and their agencies that are not otherwise covered by this schedule, after June 30, 1998.

The index shall be a public record and shall include, at minimum, the following information with respect to each database listed therein: a list of the data fields; a description of the format or record layout; information as to the frequency with which the database is updated; a list of any data fields to which public access is restricted; a description of each form in which the database can be copied or reproduced using the agency's computer facilities; and a schedule of fees for the production of copies in each available form. Electronic databases compiled or created prior to the date by which the index must be created in accordance with this subsection may be indexed at the public agency's option. The form, content, language, and guidelines for the index and the databases to be indexed shall be developed by the Division of Archives and History in consultation with officials at other public agencies.

The guidelines set out in this document are designed to assist state agencies and local governments in meeting the mandated requirements.

Introduction

These guidelines reflect both the current database indexing requirements of the revised public records law and planned improvements in two related , statewide services of the Department of Cultural Resources—public records management and public access to government information. The guidelines lay the foundation for future “global” state and local standards for managing and indexing all of North Carolina ’s electronic public records.

The department, through its Division of Archives and History and Division of State Library, is committed to providing mechanisms for the widest possible public access to government information. These mechanisms include the development of locator systems that are compliant with national and international standards for data indexing , access, and exchange. The division supports the further development of interoperability standards through cooperation and consultation with other agencies.

Similarly, the department is charged with managing state and local public records , the heart of government information. The records management program of the Division of Archives and History helps guard the general public ’s right of access to its records, the privacy rights of individuals, and the security of the records themselves. The records retention and disposition scheduling process is central to this management.

The provisions of G.S. 132-6.1. only obliquely address the statewide records management program and make no mention of locator systems. In calling for “the index,” however, the amended law prescribes one set of database documentation standards , applying equally to all state agencies, county and municipal governments, regional authorities, and other custodians of public records. And as agencies collect the specific indexing information required by the law, they will also be collecting basic data needed for locator-service indexing as well as for records retention and disposition scheduling. Accordingly , this document is divided into two major sections reflecting these complementary initiatives—“Basic Database Indexing” and “Appendix I: Advanced Database Indexing.”

“Basic Database Indexing” provides an overview of current statutory indexing requirements and includes eleven information elements with instructions for their completion. This section also provides criteria for identifying databases that must be indexed and an Electronic Records Officer Registration model form.

Appendix I: “Advanced Database Indexing” is a draft representing an initial exploration of the potential information elements to be included in a global index of state and local public records. This index structure is now under study by an ad hoc group representing the Division of Archives and History, the Advisory Committee on Electronic Records (ACER) , the Division of State Library, and the Office of State Planning. This work is being carried out under the general authority of the Department of Cultural Resources as established in G.S. § 132-8, § 132-8.1, § 132-8.2, and G.S. § 121-5. The guidelines specific to advanced

indexing will remain in draft and advisory in nature until such time that global indexing can be supported by administrative rules. In order to satisfy future requirements , however, agencies may wish to consider recording (as text) those advanced elements that can readily be obtained during basic indexing work.

Of primary consideration in the development of both the basic and advanced guidelines is the compatibility of those index specifications needed for state and local records management with those of emerging “metadata” standards, such as Government Information Locator Service (GILS). A high priority is given to unifying these specifications under a single , statewide, indexing structure.

Records managers, information resource managers, and general administrators must exercise professional judgment in making certain decisions about database indexing , given the lack of precedence and absence of administrative rules. These decisions should be based on (1) a general familiarity with the public records law , (2) a specific knowledge of statutes and regulations that govern the agency , and (3) a familiarity with the guidelines contained in this document. Agency legal counsel may be of assistance in these matters.

Insofar as resources permit, the division’s State Public Records Cataloging Services (SPRCS) staff will be happy to provide advice about particular database indexing situations. This advice will reflect professional rather than legal opinion but may prove helpful in framing the issues for decision makers.

Finally, in responding to the new indexing provisions , agencies are urged to look beyond the immediate requirements of the law , toward developing a comprehensive records management program, encompassing all types of public records—electronic , paper, and microform.

General Information

Documents on the Internet

This document and others related to North Carolina electronic public records are available via the Internet. The home page of the Department of Cultural Resources is at <http://www.spr.dcr.state.nc.us>.

Contacting the SPRCS Staff

Please contact the division if you have questions or need additional information.

Mailing address:

SPRCS
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Division of Archives and History
109 East Jones St.
Raleigh, NC 27601

Phone: (919) 733-7305 (8:00 a.m.-4:30 p.m. , Monday-Friday)

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E-mail: sprcsmail@ncsl.dcr.state.nc.us

FTP server address: <ftp.spr.dcr.state.nc.us>

Definition of Terms

- **Agency**

Any administrative subunit of state , county, municipal, or regional government within the State of North Carolina.

- **Computer Database**

"A structured collection of data or documents residing in a database management program or spreadsheet software." *N.C.G.S. §132-6.1 (d) (1).*

An "**Old**" or "**Existing**" **Database** is a computer database created or compiled prior to the applicable indexing date mandated by G.S. 132-6.1 (b).

A "**New**" **Database** is either (1) a computer database created after the applicable , mandated indexing date or (2) an "**old**" or "**existing**" database that is *newly compiled* or otherwise *significantly changed* after the mandated indexing date. Some changes, however, are not considered significant (see "Criteria for Identifying Databases that Must Be Indexed").

Definition of Terms (cont.)

- **Computer System**

An **electronic data-processing system**.

Either a stand-alone computer , with or without additional terminals ;

or

A group of computers networked in either a “client/server” or “peer-to-peer” configuration;

or

Any group of computers jointly hosting a particular database.

- **Database Owner**

The agency or agency unit that has the authority and responsibility to set policy regarding access to a particular database—the entity having intellectual control over the database.

- **Department**

The Department of Cultural Resources

- **Division**

The Division of Archives and History.

- **Electronic Data-processing System**

“Computer hardware, computer software, or computer programs or any combination thereof, regardless of kind or origin.” *N.C.G.S. §132-6.1 (d) (5)*

For the sake of brevity, this document refers to such a system as a “**computer system**”.

- **User**

Any person (or automated agent acting on that person ’s behalf) who wishes to review or receive copies of data owned by an agency.

Basic Database Indexing

Criteria for Identifying Databases that Must Be Indexed

The public records law defines a *database* as “a structured collection of data or documents residing in a database management program or spreadsheet software. ” Under the law, databases created, compiled, or newly compiled (significantly changed) after certain dates must be indexed. However , not all changes are considered *significant*. Based on a February 26, 1996, advisory interpretation of N.C.G.S. § 132-6.1(b) by Senior Deputy Attorney General Ann Reed and Special Deputy Attorney General Charles J. Murray , **the addition of new data to existing data fields does not represent the compilation of a “new” database and does not, in itself, subject the database to mandatory indexing.** (See question 2 below.)

N.C.G.S. §132-6.1 (b) directs that the Division of Archives and History , in consultation with officials of other agencies , develop the form, content, language, and guidelines for the index and the databases to be indexed. The division and the Advisory Committee on Electronic Records (ACER) have noted two important issues not directly addressed in the new legislation but which must be considered by agencies in determining whether a particular database must be indexed:

1. Must all new databases be indexed?

This question exists because the division and ACER find that the indexing of certain new databases would appear to serve no practical public interest and , indeed, would be counterproductive of legislative intent and general efforts to improve public access to state and local electronic records. Generally speaking , a new or newly compiled database or spreadsheet must be indexed if it meets either of the following criteria:

- Provides primary data supporting the conduct of agency business—serves as the master catalog, file, or inventory listing for agency entities , events, processes, or transactions.
- Contains legal, administrative, fiscal, or historical records, as determined by the agency’s retention and disposition schedule , that would otherwise be recorded on an enduring medium (e.g. , microform or paper)—records that have obvious long-term value or that otherwise would merit the expense of microform.

The division believes that indexing should be required for any new or newly compiled old database that meets all of the following criteria:

- The data records exist within the context of a database or spreadsheet program. Individual documents or data files grouped together for ease of access do not constitute a database.

- The database contains records created or compiled by or on behalf of a state or local agency in North Carolina. Copies of databases owned by private or federal sources normally are not subject to indexing and, indeed, may be protected by copyright or non-disclosure provisions.
- The database or spreadsheet serves a public purpose and has legal, administrative, fiscal, or historical value as determined by the agency's retention and disposition schedule.
- The database or spreadsheet is an "original" in that it does not consist entirely of a subset or copy of another database.
- The database or spreadsheet contains one or more public records. This criterion applies without regard to the state of the underlying software development or the extent of the database or spreadsheet use.

The division believes that indexing should not be required for the following types of databases:

- A database supporting the operation of an e-mail or similar system. An e-mail system is, essentially, an insecure medium. The Division of Archives and History, for the present, will not standardize retention and disposition schedules for e-mail and similar informal communications systems databases.

Caution: Certain e-mail *records* (as opposed to the underlying e-mail *database*) may be of long-term value. Since the security of such records cannot be adequately maintained within an e-mail system, the records should be transferred as soon as possible to a durable paper, microform, or other electronic medium and scheduled for retention and disposition.

- A database that exists solely to enhance personal, group, or agency productivity is not subject to mandatory indexing *so long as the records do not materially impact the public's interests*. Such "exempt" databases include general facilities or personnel scheduling systems, or similar "convenience" systems producing records often destroyed within a short time after their creation. For example, a staff member's database "address book" normally does not require indexing.

Caution: The records of a short-term project may have long-term value. For example, a database created in conjunction with the work of a short-term study commission would not meet the definition of a "convenience system" and may well hold records critical to the commission's findings, giving it a legal and historical *useful life* far greater than the *active life* of the database itself. Similarly, an "ad hoc" database that is reconstituted at intervals of one year or less may actually represent a continuing database series. A database containing a

spreadsheet, compiled annually, that lists current salary ranges and calculates current fringe benefits represents an example of such a series.

The following conditions have no bearing on whether or not a database is subject to indexing:

- The size and configuration of the computer system on which a database resides.
- The number of staff members regularly or occasionally using the database.
- The state of development of the database or the extent of its use *if it contains one or more public records*.

2. Under what conditions is the indexing of an already existing database required?

The division and ACER agree that only *significant* changes to an existing (old) database after the applicable mandatory indexing date represent the compilation of a new database that must be indexed.

- An existing database that is structurally altered to change its utility or purpose is considered a newly compiled database and therefore becomes subject to mandatory indexing. Examples of such changes include the addition of new application modules, major alterations in database architecture, or the addition of significant data fields. **Simply adding new data to existing data fields is not considered significant and does not, in itself, constitute the compilation of a new database that must be indexed.**

A special case exists when a database is copied and fields are subsequently deleted from the copy. While, at least for the present, it is not considered necessary to index the resulting edited copy, the agency's internal documentation should make clear that the truncated database does not replicate the original.

- The addition of new fields recording information that already can be derived from the database is not considered significant. For example, if each record in the database already contains a field for personal name, formatted as "last name, first name, middle name," and the field, "last name," is added, the structure of the database remains unaltered.
- Technical changes not related to informational content (e.g., increasing the allowable length of a field, changing the number of decimal places in a calculation, enlarging a 5-digit ZIP code field to accommodate a 5+4 code, or adding a 4-character year field to augment or replace a 2-character field) are not considered significant.

Basic Database Indexing Requirements

Introduction

The new public records law notes six specific indexing requirements for each database to be indexed (**boldface** added):

The index shall be a public record and shall include, at minimum, the following information with respect to each database listed therein: **(1)** a list of the data fields; **(2)** a description of the format or record layout; **(3)** information as to the frequency with which the database is updated; **(4)** a list of any data fields to which public access is restricted; **(5)** a description of each form in which the database can be copied or reproduced using the agency's computer facilities; and **(6)** a schedule of fees for the production of copies in each available form.

G.S. § 132-6.1 (b)

Agencies affected by these requirements vary significantly in size , circumstance, technical expertise, and in the extent and configuration of their database hardware and software. In developing the guidelines , the division has attempted to find a middle ground ; but smaller agencies may require vendor assistance, and larger agencies are likely to need additional , internal standards and procedures.

To meet these six statutory requirements , it is recommended that the following information elements be included in, or directly referenced by, each database description. Note that each element title (in **boldface**) is followed by a sample box containing a short-form instruction and an illustrative response to that instruction. The illustrative responses , indented and in **boldface**, are applicable to an Archives and History database , ACON. Bulleted notes follow the sample box where appropriate.

Basic Indexing Information Elements

A. Title

List the title of the database and , optionally, its acronym.

Archives and History Contacts (ACON)

- Use the complete title of the database as it is most widely known. This title should serve to distinguish this database from all other databases owned by the agency.

B. Agency/Owner

List the name of the agency , organization, section, branch, etc. that sets policy with regard to accessing this database.

**Department of Cultural Resources/Division of Archives and History/
Director's Office**

- At minimum, record the name of the office or work unit at the specific level within the organization's hierarchy that has responsibility for the contents of the database—the database owner.
- It is highly recommended that the full, hierarchical name of the owner be used. As per the example, such a name begins with the top level agency, followed by the immediate subdivision, followed by the next subdivision of the first, until the actual work unit is reached. Each name in the hierarchical chain is separated by a forward stroke ("/").

C. Database Abstract

Provide a narrative description of the database, writing for a non-technical audience. Descriptions can be as long as 500 words.

ACON is a database containing "contact" information—names, titles, addresses, phone numbers, etc.—related to individuals and groups associated with the division's public records management program. In its present release, it is used as both a practical tool and sample database for the development of records indexing standards.

ACON is a Microsoft Access, Version 2.0 database. Each record in the ACON primary table, "Contacts," includes a mailing label and a wide variety of other contact-related information. Each Contact record can be linked to none, one, or many "address books" (listed in the cross-reference table "Books"); each book can be processed independently. The book, ACERMstr, for example, lists all the appointed members of the Advisory Committee on Electronic Records (ACER). Other important Books include those for county and municipal attorneys, state and university records officers, individuals requesting inclusion on the "electronic records" mailing list, and officials of the Department of Cultural Resources and its Division of Archives and History.

- The contents of this field should contain enough descriptive information for the reader to determine whether or not the database warrants contacting the owner for further information.
- The abstract may include (but is not limited to) a discussion of the information content (including data coverage, persons, events, and topics), forms of information, time span, and geographical coverage.

D. Database Update Frequency

List one of the following:

- Daily
- Bi-weekly
- Quarterly
- Yearly
- Continuously
- Weekly
- Monthly
- Semi-annually
- As needed
- Other (list)

As needed

E. Legal Constraints on Database Access

If this database contains data elements closed to the public , so note, optionally citing the pertinent North Carolina General Statute(s) or federal regulation(s). Otherwise , list “None.”

None

- **Sample entry for database named “CREP” containing closed fields:**

The following is a sample entry for the Cultural Resources Evaluation Program (CREP), an archaeological resource database owned by the Archaeological Branch, Archaeology and Historic Preservation Section, Division of Archives and History, Department of Cultural Resources:

If this database contains data elements closed to the public , so note, optionally citing the pertinent North Carolina General Statute(s) or federal regulation(s). Otherwise , list “None”.

North Carolina General Statute § 70.18 notes that “information concerning the nature and location of any archaeological resource, regardless of the ownership of the property, may be made available to the public under Chapter 132 of the North Carolina General Statutes or under any other provision of law unless the Department of Cultural Resources determines that the disclosures would create a risk of harm to such resources or to the site at which such resources are located.”

Cultural Resources has determined that disclosure of information contained in three fields in the CREP site record would create such a risk. These fields, representing approximately 3% of the site information, are accordingly closed to public inspection: (1) UTM Zone (site location by UTM coordinates), (2) Directions to Site, and (3) Owner/Tenant Information.

F. Form(s) of Digital Copies of Database

For each digital form (tape, disk, cartridge, etc.) in which the database can be copied or reproduced using the agency's computer facilities, describe the technical format or presentation of data elements and records. (See also "G," below.)

All digital copies are generated as DOS files (typically, Microsoft DOS 4.20); each copy is represented by one file (which may be several megabytes in size). Files are provided on 1.44 Mb diskettes (IBM-PC compatible). The layout of output files depends on the export type option (.mdb, .rtf, .txt, or .xls) selected. It should be noted that only the .mdb and .xls formats provide data in a form that can be directly manipulated; both the .rtf and .txt formats require additional editing by the user. For further descriptions of these formats, consult the table indexes for this database (see "G" below) and standard references on Microsoft Access 2.0, Microsoft Excel 5.0, and Microsoft Word 6.0a.

G. Database Digital Copy Media and Costs List

For each digital form listed above, note specifications and costs.

Any DOS copy: 1.44 Mb 3-1/2" diskettes, 135 tracks/inch, \$1.00/diskette.

H. Report Reproduction Costs List

For each available printed, plotted, or photographic database output format, list per-unit costs.

Standard 8-1/2 x 11" printer output (200 dpi): \$0.15/page.

I. Custom Services Costs

If the agency volunteers to create or compile a record or report that does not otherwise exist, list known applicable fee(s). Otherwise, list "No custom services available."

Custom report preparation: \$35.00/hr., to be billed in fifteen-minute increments, plus listed costs of digital and printed reproduction media.

J. List of Database Data Modules

List and identify pertinent database tables, files, spreadsheet worksheets, or similar modular units of data. A database may consist of a single data module or a collection of related data modules.

Contacts—The primary database table

Books—Contains address book list and descriptions

Do Not Touch—Operations only, stores "next available" integers and machine numbers

T_States—List of two-char. state/territorial postal codes and full

names—user interface operation only

- Do not list tables, worksheets, etc., used in database maintenance (e.g., a temporary table generated as a result of database administration activities).

K. Annotated List of Fields (one list per data module)

For each pertinent module listed above, furnish a list of data fields (read also “columns”; “data elements”) and provide the following information for each:

- Name: The name of the data field.
- Description: This information defines and describes the element, noting its purpose and any pertinent information on how the data is derived (optional).
- Restricted Field Indicator: If the element is closed to public inspection by one or more state statutes or federal laws, so note. Optionally, append the string “(closed-” + {citation(s)} + “)” to the description, replacing {citation(s)} as described in the notes below. (The quotation marks around the strings should not be included in the actual documentation.)

See “Basic Indexing Table Layout for Sample Database: ACON”

- Notes on Description in box above:

The division highly recommends that this description be included since it is often critical to the public’s understanding of the information contained within the database. In most commercial database products, this description is created and stored in the data dictionary or table definition. For certain fields in legacy databases, this description may neither exist nor be determinable, in which case “**unknown**” should be entered.
- Notes on Restricted Field Indicator (citation formatting) in box above:

Each citation should be written without spaces and prefixed by either “NCGS” (N. C. General Statutes), “USC” (U.S. Code), or “CFR” (Code of Federal Regulations), as appropriate. Multiple citations are separated by semicolons. Note also that a single hyphen is inserted between the word “closed” and the first or only citation. Formatted example: “(closed-NCGS170-2;NCGS170-18)”
- Generating an Annotated List of Fields Report
 - A. If the database includes data dictionaries or table definitions and the capability to generate reports of same, the required annotated lists of fields can be generated upon user request via the database’s dictionary/table standard report. This avoids the necessity of storing large volumes of paper, ensures the currency of information provided to the public, and encourages better database documentation practices. Preparation for generating “on-demand” field lists includes making certain that the dictionary/table definition entries are accurate and that closed fields are noted. See also “Reporting Table Descriptions,” page 14.
 - B. Agencies are urged to review the more detailed reporting requirements of the division’s “Advanced Database Indexing” guidelines before developing any software or procedures for reporting annotated fields.

(See “Appendix I.”)

Basic Indexing Table Layout for Sample Database: ACON

Note: This illustrative table contains the minimal information currently required by the N.C. Division of Archives and History. See the “Advanced Database Indexing” section for comprehensive tables.

February 1996

Table Name: **Contacts**
Notes: Native format is Microsoft Access 2.0. Data derived from table definitions.

| <u>Field Names</u> | <u>Field Descriptions</u> |
|--------------------|--|
| CID | Contact ID (unique to database) |
| MailLabel | Mailing label for individual or group |
| Pfx | Personal Title (e.g., “Ms.,” “Mr. & Mrs.”) (optional) |
| Person | Familiar Name (e.g., “Buzz,” “Jo Ann,” “Bill and Virginia”) (optional) |
| AlphaName | Last/Group Name (e.g., “Smith,” “Smith & Wesson”) |
| Soundex | Soundex Code (derived from AlphaName) (optional) |
| SortName | Look-up Name (e.g., “Smith, John”) |
| City | City (derived from MailLabel) |
| ST | Two-character State code |
| Zip | Zip Code (5 or 9 digits) (optional) |
| Bphone | Business telephone (optional) |
| Ext | Phone extension (optional) |
| Fax | Fax telephone (optional) |
| Hphone | Home telephone (optional) |
| Courier | State of N.C. Courier Code (optional) |
| VendNum | Vendor Code (optional) |
| Internet | Internet address (optional) |
| Note | Note (searchable) (optional) |
| Stamp | Date Stamp—date entry made or last updated (IntFmt) |

Indexing Legacy Databases Associated with Older Computer Technologies

Numerous state and local agencies still use databases built using software as much as thirty years old. These “legacy” databases are often built on arcane , unique processing programs and record layouts that are poorly documented , if at all. Nevertheless, agencies often have valid reasons for making significant changes in a still active legacy database rather than creating a new one. As noted earlier , such changes would result in a “new” database that must be indexed; but the effort necessary to fully index some legacy databases may far exceed any public benefit provided.

At present, the division and ACER can envision no single set of written instructions that are applicable to all legacy databases. If an agency finds that it must index such a database but believes that it cannot effectively or efficiently meet the required indexing standards set forth in this document, it should contact the Division of Archives and History for assistance.

As its resources permit, the division will work with the agency or database owner in performing a records analysis of the database and in developing a records retention and disposition schedule for it. This schedule will note any special conditions affecting database indexing and , if such conditions exist , any recommended indexing modifications. At this time, the division cannot assure agencies that the recommended modifications will be legally acceptable but does note that the process itself will document the agency ’s good-faith effort to comply with the statute.

Indexing Geographic Information Systems (GIS) Databases

The special nature of GIS databases requires a somewhat different indexing treatment. For the present, GIS material should be treated as follows:

- Each logical GIS group (e.g., a collection of associated geographical information sets stored as a single “GIS” unit, as opposed to separate main files and layers) should be considered a database.
- As defined above, each database should be indexed using the following information items (as described in the “Basic Database Indexing Requirements” section):
 - A. Title
 - B. Agency/Owner
 - C. Database Abstract
 - D. Database Update Frequency
 - E. Legal Constraints on Database
 - F. Form(s) of Digital Copies of Database
 - G. Database Digital Copy Media and Costs Lists
 - H. Report Reproduction Costs List
 - I. Custom Services Costs

- Tentatively stated, the Basic Indexing Information element “J” (List of Database Data Modules) for GIS databases will be subdivided as follows:
 - a) List each geographic area covered, including a description of each area and, optionally, a formal mathematical representation of this area.
 - b) For each geographic area covered above, record a list of the layers and a description of the data contained in each layer, including applicable metadata elements either conforming to or convertible to the *Content Standards for Digital Geospatial Metadata*.
 - c) For each of the above entries, follow Basic Indexing Information element “K” (Annotated List of Fields) instructions.

Note: The GIS guidelines are subject to modification.

General Recommendations

Agency Electronic Records Officer (ERO) Registration

The division has begun voluntary registration of agencies and their EROs. It is recommended that state agency heads, county managers, and municipal CEOs designate an Electronic Records Officer (ERO) to perform three basic duties for their governmental unit:

1. To make primary decisions about the agency’s overall electronic public records management.
2. To serve as the division’s primary contact regarding database indexing guidelines and requirements.
3. To facilitate communications between the division and the agency and database owner personnel directly responsible for meeting the new requirements of G.S. 132.

The division recommends that the ERO be an appropriate representative of the agency’s administration. The individual need not possess special computer skills or knowledge but should be generally familiar with the agency’s computer management structure. The division suggests that this staff member might be the Records Officer, Information Resource Manager, or Business Manager, noting, however, that smaller agencies may have none of these positions and that chief administrators may prefer to assign other personnel.

The attachment to these guidelines contains a Public Electronics Records Officer Registration form. It is requested that agencies complete and forward a copy of the form to the division by fax or mail as indicated at the bottom of the form.

Indexing Administration

Each agency is urged to develop uniform procedures for indexing databases and for handling user requests for database index information. Indexing information should be centralized to the extent possible in order to facilitate its availability for public inspection. As resources permit, the Division of Archives and History will provide requesting agencies

individual assistance in resolving indexing issues and will participate in indexing workshops scheduled by mutual agreement.

If a user wants detailed information about a database , the database owner should agree to supply this information within a reasonable time frame and to provide an estimate of the date or time when the material will be ready for user inspection. It is preferable to generate most table-level documentation on an “as needed” basis. The information should be furnished either free of charge or on a cost-per-page basis ; agencies or owners experiencing a high volume of requests may want to implement an internal system of request and tracking forms to support this work.

If a user desires a digital copy of the database or some portion thereof , it is preferable that this user discuss copy details with a technically-knowledgeable staff member. If users raise questions or make requests that the agency finds difficult to address , the agency ERO or other appropriate staff may contact the division for assistance.

Annual Inventory

An annual inventory is a fundamental electronic records management tool. Each agency is strongly urged to conduct an annual inventory of its database holdings. A simple listing of all databases, each identified by name and owner and annotated with a one-sentence description, including an indication of the presence of any restricted data , should be prepared and centrally located. A suggested database inventory worksheet with instructions is available to agencies via the Internet at <http://www.spr.dcr.state.nc.us>.

Reporting Table Descriptions

Most commercial database software products can generate reports listing data fields found in files or tables. The control data files used in creating these reports are called “data dictionaries,” “table definitions,” “data maps,” or similar names. The preformatted reports are usually available through a special menu or command and , when invoked, generate either a screen or printed report noting the name , data type, display/storage length, and other specifications of each field. It is standard practice for database designers to record field descriptions that are displayed in these reports. Thus , generally speaking, if the names of the datafiles or tables comprising the database are available , this requirement can be met using existing database features.

Standardized Copy Fees

The division strongly recommends that within each source agency copy fees for all public records be standardized to the maximum extent possible. Certainly , unless special circumstances exist, the copy costs charged by each owner can be made reasonably consistent across various databases , and it may be in the best interest of the agency to develop uniform copy schedules governing all owners.

SQL Software

The division highly recommends that state and local agencies purchasing commercial database software ensure that this software is “SQL-compatible.” Pronounced “sequel,” the acronym stands for “Structured Query Language.” SQL was originally developed by

IBM and is now used by virtually all major software publishers to provide a common method for accessing their databases. While SQL comes in several dialects , all are generally acceptable.

Internet Access

Governmental units lacking direct Internet capability are strongly urged to consider acquiring access within the next twelve months. Given present trends , it appears that the Internet (or its successor) will become the common carrier for many inter-governmental and inter-agency communications. Internet access is available across the state through a variety of services, and the cost can be less than \$500/year. The agency needs only a personal computer, a modem, and a software browser (usually supplied free) to access the Internet via telephone line.

Attachment: Public Electronic Records Officer Registration (model form)

Check appropriate boxes ; type or print information. If you need help , call SPRCS at (919)733-7305

| Electronic Records Source Registration | | | |
|---|---------------------------------------|---------------------------------------|--------------------------------|
| <input type="checkbox"/> County | <input type="checkbox"/> Municipality | <input type="checkbox"/> State Agency | <input type="checkbox"/> Other |
| Full Name of County , Municipality , State Agency , or Other Records Source | | | |
| Short Name or Acronym for Source (optional) | | | |

| Electronic Records Officer (ERO) Registration | | | |
|---|--|--|---------------------------------|
| Electronic Records Officer Postal Mailing Label (please furnish) | | Name of ERO | |
| | | Job Title | |
| | | Telephone | Fax |
| | | State Courier Code (if available) | Internet Address (if available) |
| Do You Have Access to the Internet? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Which Method of Quick Contact Do You Prefer? <input type="checkbox"/> Fax <input type="checkbox"/> Phone <input type="checkbox"/> Internet E-Mail | |
| A. Do You Use a Personal Computer? <input type="checkbox"/> Yes <input type="checkbox"/> No (If "Yes", complete B & C) | | B. Computer Type <input type="checkbox"/> IBM-compatible <input type="checkbox"/> Apple | |
| | | C. Does Your Computer Have a Modem? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Electronic Records Officer 's Signature | | | Date |

| Agency Authorization | |
|----------------------------------|------|
| Name of Authorizing Officer | |
| Authorizing Officer 's Title | |
| Authorizing Officer 's Signature | Date |

| |
|--|
| Fax completed form to State Public Records Cataloging Services , (919) 733-8807, or mail to: SPRCS, Division of Archives and History , 109 East Jones Street , Raleigh, NC 27601-2806 |
|--|

5.96SPRCS1.2

Appendix I

Advanced Database Indexing (draft)

Introduction

The division places a high priority on the development and implementation of a global , publicly accessible indexing and locator system for all state and local public records. The basic components of this system have already been given general shape by the database indexing requirements of S.B. 426 (as reflected by the “Basic Database Indexing Requirements” section of this document), by the work of the division’s State Public Records Cataloging Services (SPRCS) unit , and by the national data indexing compliance standards developed by the Government Information Locator Service (GILS) and Geographic Information Systems (GIS).

In order to advance this undertaking and make the best use of resources , the division, in conjunction with others, has developed this “Advanced Database Indexing” appendix, the first draft of a documentation record for global indexing. This record consists of thirty-six indexing information items , eleven of which comprise the required , basic indexing record. Items 34-36 remain incomplete.

The division’s main objectives at this point in the development of the advanced guidelines are (1) to indicate work-to-date on the proposed record items , (2) to solicit reader comment, and (3) to suggest that agencies consider recording as text those advanced indexing elements that can be readily obtained during basic indexing work.

The rather voluminous documentation that follows provides an example of actual response information (based on the sample ACON database) and any notes relevant to the information item.

Advanced Indexing Information Elements

Note that each element title (in **boldface**) is followed by a sample box containing a short-form instruction and an illustrative response to that instruction. The illustrative responses , indented and in **boldface**, are applicable to an Archives and History database , ACON. Bulleted notes follow the sample box where appropriate. The reader should refer to the Basic Database Indexing section for information on those eleven information elements identified by underlined title only.

Also note that the instructions for the “Annotated Lists of Fields” element vary from those in “Basic Guidelines.”

Advanced Database Indexing Elements (cont.)

1. **Title** (See Basic Database Indexing, element “A”)

2. **Acronym**

List the short name or acronym for the database.

ACON

- If this database is known by an acronym, abbreviated name, or name which takes a significantly different form, specify this name.

3. **Agency/Owner** (See Basic Database Indexing, element “B”)

4. **Index Source**

Provide contact information (name, title, address, phone, fax, Internet) for the individual creating or modifying this database index.

Larry Misenheimer, Deputy Director, Division of Archives and History, 109 E. Jones St., Raleigh, NC, 27601. Voice: (919) 733-7305; Fax: (919) 733-8807

- If changing an index created by others or created under a different job title, this field should be modified to reflect current information.
- If the record source is employed by an organization different from that recorded in the owner field, the source should append a comma and the name of his/her organization.

5. **Last Index Modification**

Provide the “stamp” date for this indexing document—the date this index document was last modified—in the format mm/dd/yyyy (note that “year” contains four digits).

1/15/1996

6. **Database Abstract** (See Basic Database Indexing, element “C”)

7. **Database Purpose**

Provide a narrative description of the reason(s) for the existence of the database.

To furnish a central mailing/contact list for the various component elements of the division’s records management programs. Pertinent data was imported from a character-based database begun in 1987; the earliest data used date from 1989.

- This field should describe the lineage of the database and relate any specific agency requirement, function, or goal which prompted the creation of this database or which is responsible for the continued delivery of information.

8. **Agency Program**

Describe the major agency program or mission supported by this database.

This is a “working” database providing general program support for the Division of Archives and History (Cost Center 1210); the database is not required by law or divisional policy.

- This field is used to identify the major agency program or mission supported by this database project. The field should cite any legislative actions or authorities which require the operation of the database.

9. **Database Type**

List one of the following or otherwise describe:

- Flat file (non-relational database)
- Relational database
- Spreadsheet database
- Document management database
- Image management database
- Geographic Information Systems Database

Relational database

- If none of these phrases seems appropriate, describe in your own words the method or type of technology used for this database.

10. **Database Update Frequency** (See Basic Database Indexing, element “D”)

11. **Time Span**

List the time span for data included in the database. For both start and end dates, use format mm/dd/yyyy; separate multiple dates by single hyphen; use “?” for unknown mm, dd, or yyyy. For “circa” year, precede year by “?.” If database remains current, list start date followed only by hyphen. Examples:

1/1/1992-12/31/1995

?/?/?1880-7/4/1902

4/?/1983-11/30/1989

10/4/1995-

9/13/1989- *[note ending hyphen]*

- If the principal database table (read also “record file”) contains a date or time/date “stamp” field noting when the record was last updated, one way to obtain time span limits is to sort all records by this field (ascending order)—the first record stamp is the start date, the last, the end date.

12. **Database Stats**

List the following (approximations acceptable).

- Current size of database (including control programs)
- Number of primary records
- Estimated number of records to be added during next twelve months

Current Size of Database: 809 Kb

Number of Primary Records: 602

Anticipated Additions in Next Year: 2,000

13. **Technical Expertise Required**

Use one of the following:

- None (database supports public or casual use)
- Some (database can be mastered quickly by a user generally familiar with computers)
- Great (database is difficult to use)

Some

- The information applies only to the use of the database. Do not consider the expertise needed to connect to or begin a session with the database. Do not make any assumptions about the type of person who will most likely use this database.

14. **Database-specific Documentation**

List any documentation supplied by the owner or custodian of this database. Otherwise , list "None."

None

- If the database owner , database custodian, or some other associated agency has created or distributed any documentation that describes the operation of the database or database support system , or that is otherwise helpful to the understanding of the database , list those publications here.
- Indicate where the documents can be obtained. If the contact information or order process is the same as that recorded elsewhere in this document , make reference to that information instead of repeating it here.

15. **General Database Documentation**

List major commercial documentation of database software and source(s) for same.

***User's Guide, Microsoft Access Relational Database
Management System for Windows, Version 2.0***

Available from:

Microsoft Press

Microsoft Corporation

One Microsoft Way

Redmond, WA 98052-6399

USA

Microsoft Press Order Department:

1-800-677-7377

- If documentation exists that describes the operation of the database or database support system, or is otherwise helpful to the understanding of the database , list those publications here and indicate where these documents can be obtained.

16. **Database Access Modes**

List all modes of database access available to the public and provide address(es)/contact information for each. Use as many of the following modes as are applicable:

- On-Site via Terminal
- On-Site via Workstation/LAN
- Dial-up
- Telnet
- World Wide Web
- Gopher
- FTP
- WAIS
- Other Internet Access

On-site via workstation

Available at:

**Division of Archives and History
Suite 305, Archives/State Library Building
109 East Jones St.
Raleigh, NC 27601**

- Include those details necessary for the actual use of each access mode indicated above. For On-site access , include room number(s) in the address. For Dial-up , give the telephone number , baud rate, data bits, stop bits, and parity mode. For Telnet, give the Internet address ; for World Wide Web, Gopher, FTP, and WAIS, give the Internet address and port number.

17. **Database Access Schedule**

With reference to the selection(s) made in 16 above , list access schedules and describe any special conditions.

**9:00 a.m.-4:00 p.m., Monday through Friday except on state holidays.
It is recommend that user call (919) 733-7305 to arrange appointment;
support personnel may be unavailable due to field work or previous
commitments.**

- For each mode of access indicated above , give the days of the week and times of day this database is available. Indicate any exceptions to those standard times.

18. **Legal Constraints on Database Access** (See Basic Database Indexing, element “E”)

19. Physical Factors Affecting Database Access

Describe any special physical conditions , impediments, or enhancements associated with accessing this database. Otherwise , list “None.”

Support personnel may be unavailable on certain days and times. Users therefore are urged to contact the Director’s Office several workdays in advance of desired access date.

- Describe any physical conditions that must be met before someone can access this database in a timely fashion or any impediments or enhancements associated with accessing this database. For example , a potential user might be required to show proper identification or be issued a security pass ; extra preparation time may be necessary to retrieve and mount data tapes ; access at a small office may depend on the availability of a particular staff member who is not always at the location; terminals may not be available to the physically disabled. Conversely , special access features may be provided for the hearing or visually impaired.

20. Other Factors Affecting Database Access

Describe any additional constraints or enhancements—security , copyright, etc.—affecting public access to this database. Otherwise , list “None.”

Copying of the entire database in DOS Access 2.0 format is encouraged as the easiest means of access for those having systems that support use of the copy. This requires, however, that the user agree to honor copyrights on certain control software used therein. Moreover, if the size of the database precludes its direct copying to a single 1.44 Mb 3-½ diskette, it can be copied to multiple diskettes only by using the DOS “Backup” converter available on the workstation (typically, Microsoft DOS 6.2). To unpack such a file, the “Restore” converter from a compatible version of DOS must be used. The division cannot supply this converter.

- If there are any other conditions that must be met before someone can access this database in a timely fashion , or if there are any impediments or enhancements associated with accessing this database , list them here.

Examples:

Condition for access: As a security measure, all users must register before being granted access.

Impediment: Only one on-site terminal is wheelchair-accessible.

Enhancement: A Braille reader is available for use by the visually impaired.

21. Available Printed Reports (selection)

List a minimum of five report names (or all printed reports if fewer are available) that can be generated for the database, providing for each a brief description. In cases where large numbers of reports are available, those selected for inclusion in the index should represent typical report formats. If applicable, add one of the following phrases to each description:

- Sample available
- Full description available
- Sample/full description available

ACON Standard Report. A printed “proof” report for any subset of records generated as the result of a database query. Sample available. (See also 22 below and sample: Appendix II.)

Other available reports format output specifically for various kinds of labels:

1 x 4 Mail Label—Avery Dennison #5161 stock, 8½ x 11”, 20/sheet

1 x 1 Mail Label—4¼ x 1”, continuous form

Shipping Label—3 x 5” (DCR/AH letterhead)

Envelope HPDJ520—Legal envelope on cited printer, no bar code.

- Do not list reports associated solely with database management—table and hex dumps, user lists, database stats., and the like.

22. Generic Printed Report:

If available, list the report that best serves as a generic “proof” print for any subset of the database records and describe this report in detail. Otherwise, list “None.”

ACON Standard Report. (See sample: Appendix II) This reports the results of any database query. It lists all “hits,” ordering them by ascending addressee name and including, for each contact, the CID (unique record key), the mailing label, the stamp date (when record last updated), business, fax, and home telephone numbers (if extant), and the e-mail or WWW address (the former for individuals, the latter for groups). An average of ten individual/group address records fit on one report page. [Note: Sample provided has been reformatted for this publication and thus contains fewer records per page.]

23. **Available Digital Reports**

I. If this database includes standard reports output digitally to off-line storage media , list the names of these reports , briefly describe their content and format , and note any additional documentation available. Otherwise , list “None.”

II. If the control software supports digital copying of database query results , describe and note any additional documentation available. Otherwise , list “None.”

I. None

II. Any database query can be output to a DOS .txt (ASCII Text) file or a DOS .rtf (Rich Text Format) formatted to approximate the appearance of the original query, or to a Microsoft Excel worksheet (*.xls format). A query result can also be used to generate a new table, which then can be exported to a new and otherwise empty Access 2.0 database. Alternately, the entire database can be reproduced. In either case, the resulting file is in .mdb (Microsoft Access 2.0 database) format.

It should be noted that only the .mdb and .xls formats provide data in a form that can be directly manipulated; both the .rtf and .txt formats require additional editing by the user.

24. **Support for Custom Reports From Database**

Describe any options available for the design and creation of custom reports. If the database or other tools support the creation of custom reports , describe the kinds of reports which can be created and the general options that can be selected.

The database on-line interface supports a variety of features to assist users in generating custom, query-based reports (e.g., a report for a particular address book, zip-code selection, city, or area code). The division will prepare other custom reports (digital or hard copy output) for a fee. A work order signed by the user is required, with delivery no more than two weeks ARO.

25. **Form(s) of Digital Copies of Database** (See Basic Database Indexing, element “F”)

26. **Database Digital Copy Media and Costs List** (See Basic Database Indexing, element “G”)

27. **Report Reproduction Costs List** (See Basic Database Indexing, element “H”)

28. **Custom Services Costs** (See Basic Database Indexing, element “I”)

29. **Process for Ordering Database Copies**

Provide instructions for requesting the production of printed or digital copies of the database (see also 30, below).

Preferred method: Contact Index Source (listed in 4 above) by fax or letter, listing requirements, fax/phone return call number, and any other information considered pertinent. (Once confirmed, the fax/letter serves as the order form.)

Alternate I: Call (919) 733-7305 and ask for a SPRCS representative.

Alternate II: Visit the Office of the Director, Division of Archives and History, Suite 305, Archives/Library Building, 109 East Jones St., Raleigh, N.C. any state workday between 9:00 a.m. and 4:00 p.m.

[Note: These processes are subject to change]

30. **Contact for Ordering Database Copies**

List contact information (name, title, address, phone number, Internet address, etc.) for requesting the production of printed or digital copies of the database.

(Same as element number 4 above)

31. **Database Computer System**

In narrative form, describe the computer system supporting the database. If the database runs on a computer network or is PC-based indicate the minimum requirements for an individual workstation. As applicable, include the following information:

- Name of computer hardware manufacturer (can be "various")
- Name of computer hardware model (can be generic ; e.g., "IBM-PC compatible/386 or greater/4 Mb memory")
- Name of operating system (and manufacturer, if warranted)
- Name of operating system version
- Name of database development software
- Name of database engine
- Name of query language (if applicable)
- Name(s) of any pertinent database level add-ins or modifications

ACON currently runs under Microsoft Access 2.0 (Jet 2.0 database engine) and Microsoft Windows for Workgroups 3.11 across a twelve-station thin-Ethernet network. Minimum machines on this network are 486 IBM-PC compatibles with 4 Mb memory and at least 160 Mb hard disks, with Ethernet cards. All add-ins necessary for operations are coded in the ACON data modules. ACON was developed in Access 2.0 and can reach all relevant Access 2.0 features.

32. **List of Database Data Modules** (See Basic Database Indexing, element, "J")

33. **Annotated List of Fields (one list per data module)**

Note: This item contains some information not included in item “K” under “Basic Indexing Information Elements.”

For each pertinent module listed above, furnish a list of data fields (read also “columns”; “data elements”) and, at minimum, provide the following information for each:

- Name: The name of the data field.
- Ordinal Number: If applicable, the integer indicating the physical position of the data element (field or “column”) as it is stored in a record (“row”) in the table. (Note: “0” is an acceptable Ordinal Number—some database file systems use this number to designate the record’s primary key.)
- Description: This information defines and describes the element, noting its purpose and any pertinent information on how the data is derived. (Note: In most commercial database products, this description can be created and stored in the data dictionary or table definition.)
- Special Conditions (Strings): These are indicators for any of four special conditions that may exist relative to the data element. They are written as character strings enclosed in parentheses and can be inserted either after the Name or in the tail of the Description, or in both. (The quotation marks around the strings should not be included in the actual documentation):
 - ◇ “(optional)”—the element is optional—an entry in this field is not required by database rules.
 - ◇ “(internal format)” or “(intfmt)”—the data for the element is stored in internal format—the proper display of this field requires a formatting conversion performed at run-time. (Dates, times, and currency are three typical examples.)
 - ◇ “(derived)”—the data displayed for the element does not reside within the field itself but is calculated from other data elements.
 - ◇ “(closed-” + {citation(s)} + “)” —the element is closed to public inspection by one or more state statutes or federal laws or regulations. Optionally, these are cited within the string. Each citation should be written without spaces and prefixed by either “NCGS” (N. C. General Statutes), “USC” (US Code) or “CFR” (Code of Federal Regulations), as appropriate. Multiple citations are separated by semicolons. Note also that a single hyphen is inserted between the word “closed” and the first or only citation. Formatted example: “(closed-NCGS170-2;NCGS170-18)” (*This is a draft recommendation for citation formatting and is subject to change.*)

See "Advanced Indexing Table Layouts (two) for Sample Database: ACON."

- At a later date, special condition strings for noting data type may be developed.

Note: The specifications for Advanced Elements 34-36 are incomplete as of 9/1/96)

34. **Scheduling Information**

- *Will note the status of the database with regard to its retention/disposition scheduling.*

35. **Database Subject Matter**

- *Will consist of one or more subject headings either taken from the existing list of Library of Congress Subject Headings or created by the agency under guidelines from the Department of Cultural Resources.*

36. **Spatial Domain**

- *Will describe the geo-spatial area represented in the database.*

Advanced Indexing Table Layouts (two) for Sample Database: ACON

N.C. Division of Archives and History

Table Name: **Contacts**
 Date Created: 6/22/95 9:57:02 PM
 Last Updated: 1/9/96 5:48:23 PM
 Notes: Native format is Microsoft Access 2.0. Data derived from table definitions.

Field Names

| | | |
|------------------|-------------------|---|
| CID | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 1 |
| | Required: | Yes |
| | Description: | Contact ID (unique to database) |
| | Notes: | Data consists of numeric code for source machine and unique address number for that machine, separated by dot. |
| MailLabel | Data Type: | Text |
| | Length: | Variable, 255 char. max. |
| | Ordinal Position: | 2 |
| | Required: | Yes |
| | Description: | Mailing label for individual or group |
| | Notes: | Mailing label data is parsed by application to generate initial address details |
| Pfx | Data Type: | Text |
| | Length: | Variable, 20 char. max. |
| | Ordinal Position: | 3 |
| | Required: | No |
| | Description: | Personal Title (e.g., "Ms.," "Mr. & Mrs.") (optional) |
| Person | Data Type: | Text |
| | Length: | Variable, 50 char. max. |
| | Ordinal Position: | 4 |
| | Required: | No |
| | Description: | Familiar Name (e.g. , "Buzz," "Jo Ann," "Bill and Virginia") (optional) |
| | Notes: | Absence of data in this field signifies an impersonal address (i.e., a company, organization, or individual known only by title). |
| AlphaName | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 5 |
| | Required: | Yes |
| | Description: | Last/Group Name (e.g., "Smith," "Smith & Wesson") |
| Soundex | Data Type: | Text |
| | Length: | Variable, 10 char. max. |
| | Ordinal Position: | 6 |
| | Required: | No |
| | Description: | Soundex Code (derived from AlphaName) (optional) |
| | Notes: | Soundex algorithm available on request |

Field Names

| | | |
|-----------------|-------------------|--|
| SortName | Data Type: | Text |
| | Length: | Variable, 50 char. max. |
| | Ordinal Position: | 7 |
| | Required: | Yes |
| | Description: | Look-up Name (e.g., “Smith, John”) |
| | Notes: | Generated by application software |
| City | Data Type: | Text |
| | Length: | Variable, 50 char. max. |
| | Ordinal Position: | 8 |
| | Required: | Yes |
| | Description: | City (derived from MailLabel) |
| ST | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 9 |
| | Required: | Yes |
| | Description: | Two-character State code |
| Zip | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 10 |
| | Required: | No |
| | Description: | Zip Code (5 or 9 digits) (optional) |
| | Notes: | Data includes only integers (hyphen on 9-digit code omitted) |
| Bphone | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 11 |
| | Required: | No |
| | Description: | Business telephone (optional) |
| | Notes: | Data includes only digits; no formatting |
| Ext | Data Type: | Text |
| | Length: | Variable, 10 char. max. |
| | Ordinal Position: | 12 |
| | Required: | No |
| | Description: | Phone extension (optional) |
| | Notes: | Data includes only digits; no formatting |
| Fax | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 13 |
| | Required: | No |
| | Description: | Fax telephone (optional) |
| | Notes: | Data includes only digits; no formatting |
| Hphone | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 14 |
| | Required: | No |
| | Description: | Home telephone (optional) |
| | Notes: | Data includes only digits; no formatting |

Field Names

| | | |
|------------------|-------------------|---|
| Courier | Data Type: | Text |
| | Length: | Variable, 10 char. max. |
| | Ordinal Position: | 15 |
| | Required: | No |
| | Description: | State of N.C. Courier Code (optional) |
| | Notes: | Includes hyphens |
| VendNum | Data Type: | Text |
| | Length: | Variable, 25 char. max. |
| | Ordinal Position: | 16 |
| | Required: | No |
| | Description: | Vendor Code (optional) |
| | Notes: | Vendor codes unconfirmed |
| Internet | Data Type: | Text |
| | Length: | Variable, 50 char. max. |
| | Ordinal Position: | 17 |
| | Required: | No |
| | Description: | Internet address (optional) |
| | Notes: | Either individual's e-mail address or group's URL |
| Note | Data Type: | Text |
| | Length: | Variable, 255 char. max. |
| | Ordinal Position: | 18 |
| | Required: | No |
| | Description: | Note (searchable) (optional) |
| | Notes: | This field generally contains ad hoc information |
| Stamp | Data Type: | Date/Time |
| | Length: | Fixed Size (8 char. on input) |
| | Ordinal Position: | 19 |
| | Required: | Yes |
| | Description: | Date Stamp—date entry made or last updated (IntFmt) |
| WorkFlag | Data Type: | Yes/No |
| | Length: | Fixed Size (1 char.) |
| | Ordinal Position: | 20 |
| | Required: | No |
| | Format: | Yes/No |
| | Description: | Ad hoc workflag toggled from screen display (optional) |
| | Notes: | Set to -1 for "true" |
| BookXrefs | Data Type: | Text |
| | Length: | Variable, 255 char. max. |
| | Ordinal Position: | 21 |
| | Required: | No |
| | Description: | "Book" ID(s); multiple values separated by "/" (optional) |
| | Notes: | Each Book ID corresponds to a record in the table "Books" |

Field Names

| | | |
|----------------------------------|-------------------|---|
| ShipLabel | Data Type: | Text |
| | Length: | Variable, 255 char. max. |
| | Ordinal Position: | 22 |
| | Required: | No |
| | Description: | Shipping label (optional) |
| | Notes: | May include directions (e.g., “Dock, Wilmington St.”) |
| CourierLabel | Data Type: | Text |
| | Length: | Variable, 255 char. max. |
| | Ordinal Position: | 23 |
| | Required: | No |
| | Description: | Courier label (for state only) (optional) |
| | Notes: | Varies from mailing and shipping labels |
| Reserved0-- Reserved4 | Data Type: | Text |
| | Length: | Variable, 255 char. max. |
| | Ordinal Position: | 24-28 |
| | Required: | No |
| | Description: | (reserved for future use) |

Table Name: **Books**
Date Created: 6/22/95 9:56:48 PM
Last Updated: 1/10/96 8:29:27 PM
Notes: Table of “address books”—one address can be linked to many books.
Currently, relational integrity of books/addresses is not being maintained.

Field Names

| | | |
|--------------|-------------------|--|
| Book | Data Type: | Text |
| | Length: | Variable, 25 chars. max. |
| | Ordinal Position: | 1 |
| | Required: | Yes |
| | Description: | Address Book Name |
| Desc | Data Type: | Text |
| | Length: | Variable, 100 chars. max. |
| | Ordinal Position: | 2 |
| | Required: | Yes |
| | Description: | “Meaning” of address Book name |
| Note | Data Type: | Text |
| | Ordinal Position: | 3 |
| | Required: | No |
| | Description: | Notes (optional) |
| | Notes: | Generally, ad hoc info. is stored here |
| Stamp | Data Type: | Date/Time |
| | Attributes: | Fixed Size (8 char. output) |
| | Ordinal Position: | 4 |
| | Required: | Yes |
| | Description: | Date stamp (record creation/update) |

Format:

Short Date (Access 2.0 specification)

Appendix II: ACON Standard Report—Query:“ACER Members”

17-Jan-96

N. C. Department of Cultural Resources * Division of Archives and History * Director 's Office

| <u>ACON ID</u> | <u>Mailing Label</u> | <u>Stamp</u> | <u>Business Phone</u> | <u>Fax Phone</u> | <u>Home</u> |
|----------------|--|--------------|-----------------------|------------------|-------------|
| 120.618 | Mr. Stephen F. Albright N.C. Dept. of State Treasurer Albemarle Building 325 North Salisbury St. Raleigh, NC 27603-1388 | 11/1/95 | (919) 733-1081 | (919) 733-9586 | |
| 120.619 | Mr. Nicholas Barnet Office of the State Controller Caswell Building 200 West Jones St. Raleigh, NC 27603-1379 | 1/7/96 | (919) 733-0178 | (919) 715-3862 | |
| 120.620 | Mr. David Bevan Chief, Information Services Section Division of State Library 109 East Jones St. Raleigh, NC 27601-2807 | 1/4/96 | (919) 733-3683 | | |
| 120.623 | Ms. Mary Sue Brown Employment Security Commission 700 Wade Avenue Raleigh, NC 27605-1167 | 1/7/96 | (919) 733-4806 | (919) 733-1128 | |
| 175.985 | Mr. Vince Batts Chief Information Architect, DHR 695 Palmer Drive , Caller Box 29528 Raleigh, NC 27626-0528 | 7/2/96 | (919) 715-0019 | (919) 733-8871 | |
| 175.913 | Margaret Bowers City Clerk City of Durham 101 City Hall Plaza Durham, NC 27701 | 7/2/96 | (919) 560-4166 | (919) 687-0896 | |
| 175.732 | Mr. Ken Eudy C/o Capital Strategies 115½ West Morgan St. Raleigh, NC 27601 | 1/7/96 | (919) 834-7927 | (919) 834-7959 | |
| 120.625 | Mr. Robert L. Fry Supervisor, Imaging Projects Glaxo Wellcome Inc. 5 Moore Drive, Admin. 1 Research Triangle Park , NC 27709 | 1/4/96 | | | |
| 120.630 | Dr. Arlon K. Kemple Computer Manager N.C. Dept. of Cultural Resources 109 East Jones St. Raleigh, NC 27601-2807 | 1/9/96 | (919) 733-7847 | | |

| <u>ACON ID</u> | <u>Mailing Label</u> | <u>Stamp</u> | <u>Business Phone</u> | <u>Fax Phone</u> | <u>Home Phone</u> |
|-----------------------|---|---------------------|------------------------------|-------------------------|--------------------------|
| 175.874 | Dr. Lee Mandell Director of Research and Info. Tech. N.C. League of Municipalities PO Box 3069 Raleigh, NC 27602-3069 | 1/7/96 | (919) 715-3933 | (919) 733-9519 | |
| 120.637 | Ms. Denny McGuire Office of the State Controller Caswell Building 200 West Jones Street Raleigh, NC 27603-1379 | 1/7/96 | (919) 733-0178 | (919) 715-3862 | |
| 120.649 | Mr. Larry G. Misenheimer Deputy Director Division of Archives and History 109 East Jones Street Raleigh, NC 27601-2806 | 8/1/95 | (919) 733-7305 | (919) 733-8807 | (919) 556-1241 |
| 120.633 | Mr. Charles J. Murray Special Deputy Attorney General Office of the Attorney General Raney Bldg. Raleigh, NC 27601-1347 | 1/7/96 | (919) 733-6026 | (919) 715-3849 | |
| 120.635 | Mr. David Olson State Archivist Division of Archives and History 109 East Jones St. Raleigh, NC 27601-2807 | 1/17/96 | (919) 733-3952 | | |
| 120.636 | Dr. Timothy R. Sanford Director of Institutional Research Campus Box 3350 , 210 Carr Bldg. UNC-CH Chapel Hill, NC 27599 | 1/4/96 | (919) 962-1500 | (919) 962-1341 | |
| 120.638 | Ms. Ann Shaw Randolph County Register of Deeds PO Box 4066 Asheboro, NC 27204 | 10/10/95 | (910) 318-6960 | (910) 318-6969 | |
| 120.643 | Dr. Lennox E. Superville Director, IRM Office of the State Auditor 300 N. Salisbury St. Raleigh, NC 27603-5903 | 1/7/96 | (919) 733-3217 | (919) 733-8443 | |
| 120.645 | Mr. Michael Unruh Administrative Office of the Courts 2000 Yonkers Road Raleigh, NC 27604 | 1/7/96 | (919) 733-7107 | (919) 715-5779 | |